

WATER POLICY INTERIM COMMITTEE

Room 172, State Capitol Building

March 9, 2020

Public Comment

My name is Jim Hagenbarth. As you are aware Representative Shaw and I encouraged the last legislature to pass HJ40 and have the Water Interim Policy Committee study weather modification and cloud seeding. Over your last three meetings a meteorologist from Idaho Power's cloud seeding program and I have presented information, data and studies that indicate the science behind and the technology of cloud seeding has developed into a very valuable tool used to enhance either snow pack or rain and dissipate hail and alleviate fog in site specific applications. Several states and Alberta are currently using cloud seeding funded with either a combination of state and local funding or just local funding. I am encourage that this Committee has taken another look at this technology in behalf of Montana. Over time things change and we get better at what we do and this is the case in regard to the technology of cloud seeding. With water becoming our most valuable asset and resource, it is imperative that the legislature reconsider weather modification laws and regulations to enhance the use of this most valuable tool, rather than keep it hindered under current law. My intentions and efforts are focused on getting Montana to recognize the huge value this tool can provide in site specific locations and not allow past experiences or perceptions of cloud seeding hamstring us into the future. Jason Mohr has done an excellent job providing the information ask for by this committee. It has been extremely helpful in understanding the current law and what some of the other states programs look like. Using all the information gathered and conferring with managers of other state programs, I am presenting to the committee an example of draft legislation with suggested amendments to existing law to allow for weather modification with appropriate safeguards. I thank this Committee for their interest and consideration.

A BILL FOR AN ACT ENTITLED: AN ACT PROVIDING DIRECTION FOR LICENSING OF WEATHER MODIFICATION ACTIVITIES; REQUIRING WEATHER MODIFICATION OPERATIONS BE ANALYZED THROUGH AN ENVIRONMENTAL ASSESSMENT AS PROVIDED IN TITLE 75, CHAPTER 1, PARTS 1 AND 2; PROVIDING FOR TERMS OF A WEATHER MODIFICATION LICENSE; REQUIRING WEATHER MODIFICATION CERTIFIED OPERATOR; REQUIRING THE DEPARTMENT TO ADOPT LICENSE AMENDMENT OR SUSPENSION CRITERIA BY RULE; PROVIDING PUBLIC NOTICE AND PROOF OF FINANCIAL RESPONSIBILITY; AMENDING SECTIONS 85-3-101, 85-3-103, 85-3-201, 85-3-202, 85-3-203, 85-3-204, 85-3-206, 85-3-208, 85-3-210, 85-3-211, 85-3-213, 85-3-204, 85-3-301, 85-3-302, MCA; REPEALING SECTIONS 85-3-102, 85-3-207, 85-3-212, MCA AND PROVIDING AN IMMEDIATE EFFECTIVE DATE.

85-3-101. Definitions. Unless the context requires otherwise, in this chapter, the following definitions apply:

(1) "Department" means the department of natural resources and conservation provided for in Title 2, chapter 15, part 33.

(2) "Operation" means the performance of weather modification and control activities entered into for the purpose of producing or attempting to produce a certain modifying effect within one geographical area over one continuing time interval, ~~not exceeding 1 year~~.

(3) "Research and development" means theoretical analysis, exploration, and experimentation and the extension of investigative findings and theories of a scientific and technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes.

(4) "Weather modification and control" means changing or controlling or attempting to change or control, by artificial methods, the natural development of atmospheric cloud forms or precipitation forms that occur in the troposphere. Weather modification includes but is not limited to cloud seeding.

~~85-3-102. Standards for research in weather modification control. The department may establish by rule standards and instructions to govern the carrying out of research and development or projects in weather modification and control as it considers necessary or desirable to minimize danger to health, safety, welfare, or property.~~

85-3-103. Department powers. In addition to any other acts authorized by law, the department may:

(1) acquire materials, equipment, and facilities as are necessary to perform its duties under this chapter;

(2) receive any funds which may be offered or become available from federal grants or appropriations, private gifts, donations, bequests, or any other source and unless their use is restricted, expend the funds for the administration of this chapter;

(3) make such studies and investigations and obtain such information as the department may deem necessary in exercising its authority in the administration or enforcement of this chapter;

(4) cooperate with public agencies or private entities in the performance of the department's functions or duties and in furtherance of the purposes of this chapter;

(5) represent the state in any and all matters pertaining to plans, procedures, or negotiations for interstate compacts relating to weather modification and control;

(6) enter into cooperative agreements with the United States government or any of its agencies, with the various counties and cities of this state, or with any private [entity](#) or public agencies for conducting weather modification or cloud seeding operations;

(7) act for and represent the state and the counties, cities, and private [entities](#) or public agencies in contracting with private concerns for the performance of weather modifications or cloud seeding operations; and

(8) conduct and make arrangements, including contracts and agreements, for the conduct of research and development activities relating to:

(a) the identification and evaluation of meteorological, environmental, ecological, agricultural, economic, hydrological, and sociological impacts of weather modification in Montana;

(b) the theory and development of methods of weather modification and control, including processes, materials, and devices relating thereto;

(c) the utilization of weather modification and control for agricultural, industrial, commercial, recreational, and other purposes;

(d) the protection of life and property during research and operational activities.

85-3-201. License and permit required for weather modification and control. A person [or other entity](#) may not engage in activities for weather modification and control except under and in accordance with a license ~~and a permit~~ issued by the department authorizing the activities

85-3-202. Department to review applications. (1) The department shall review all applications for weather modification activities. The department shall prepare ~~a report and an environmental impact statement~~ [an environmental assessment](#) pursuant to Title 75, chapter 1, part 2. The report must contain information relative to all of the criteria applicable to issuance of a [permit license](#) in **85-3-206**. ~~Prior to preparing the report, the department shall conduct at least one public meeting in the area~~

~~affected by the proposed weather modification activity. The department's actual costs of conducting the public meeting, preparing the report, and preparing the environmental impact statement must be paid by the applicant.~~

(2) The department may provide by rule for exempting from the license and permit requirements of this chapter:

(a) research, development, and experiments by state and federal agencies, institutions of higher learning, and bona fide nonprofit research organizations and their agents;

(b) laboratory research and experiments;

(c) activities of an emergency character for protection against fire, frost, sleet, hail, or fog; and

(d) activities normally engaged in for purposes other than those of inducing, increasing, decreasing, or preventing precipitation or hail.

85-3-203. Licenses -- qualifications of licensees. (1) The license to engage in activities for weather modification and control must be issued, in accordance with procedures and subject to conditions the department may establish by rule to implement this chapter. ~~establish to effectuate the provisions of this chapter,~~

(2) Applicants must to applicants who employ a certified weather modification operator and must demonstrate competence in the field of meteorology to the satisfaction of the department.

(3) If the applicant is an organization, these requirements must be met by the individual who will be in charge of the operation for the applicant.

85-3-204. Licenses -- term and renewal. The license ~~shall~~ must be issued for a period to expire on June 30 each year. ~~at the end of the calendar year in which it is issued and, if~~ if the licensee

possesses the qualifications necessary for the issuance of a new license, shall upon application be renewed at the expiration of the period.

85-3-206. Permits License -- requirements and hearing. (1) The permits license must be issued in accordance with procedures and subject to conditions that the department may adopt by rule to implement the provisions of this chapter. ~~by rule establish to effectuate this chapter.~~

(2) Within 30 days after completion of the report required under **85-3-202**, the department shall ~~hold a hearing under Title 2, chapter 4, part 6, to~~ determine whether to grant, conditionally grant, or deny the application for a permit license. The department may not grant or conditionally grant an application unless all requirements of this section are satisfied and the applicant establishes by a preponderance of the evidence that the following criteria have been met:

(a) sufficient notice of intention has been published; ~~the applicant is licensed pursuant to this chapter;~~

~~(b) sufficient notice of intention has been published;~~

~~(c)~~ (b) an applicant has furnished proof of financial responsibility in an amount to be determined by the department as required in **85-3-211**;

~~(d)~~ (c) the fee for the permit license has been paid as required in **85-3-212** ~~and the department's costs incurred under 85-3-202 have been paid;~~

~~(e)~~ (d) the weather modification and control activities to be conducted have been determined by the department to be for the general welfare and the public good. That determination must be based on a finding of whether the operation:

(i) is reasonably conceived to improve water quantity or quality, reduce loss from weather hazards, provide economic benefits for the people of Montana, or advance scientific knowledge;

(ii) is designed to include adequate safeguards to minimize or avoid possible damage to the public health, safety, and welfare and to the environment; and

(iii) will adversely affect another operation for which a permit has been issued.

(3) The department shall adopt license modification and suspension guidelines and requirements by rule.

~~(3) The department may determine not to hold a public hearing only if after giving notice of a hearing, no person files a notice of intent to appear at the hearing to contest the issuance of a permit. If a hearing is not held, the department may grant or conditionally grant a permit based on the information contained in the application and the department's report.~~

~~(4) Costs incurred by the department in holding a hearing under subsection (2) must be paid by the applicant.~~

85-3-207. Separate permit for each operation. ~~(1) Separate permits must be issued for each operation.~~

~~(2) If a permit is issued, the holder of the permit shall confine activities to the time and area limits set forth in the notice of intention, unless modified by the department. The permittee's activities must conform to any conditions imposed by the department. The permit may not be sold or transferred.~~

85-3-208. Notice of intention to apply for permit~~license~~. Before undertaking any weather modification and control activities, the applicant for a permit~~license~~ shall file with the department a notice of intention.

85-3-210. Publication of notice of intention. (1) ~~The department shall have the notice of intention, or that portion thereof including the items specified in 85-3-209, Notice of intention to conduct weather modification activities must be published by the license holder conducting the operation~~ at least once a week for 2 consecutive weeks in a newspaper having a general circulation and published within any county in which the operation is to be conducted and in which the affected area is located, or if the operation is to be conducted in more than one county or if the affected area

is located in more than one county or is located in a county other than the one in which the operation is to be conducted, then in newspapers having a general circulation and published within each of the counties.

(2) ~~The applicant shall reimburse the department for the costs of publication of the notice of intention. The publication of notice of intention must include the details provided in 85-3-209.~~

85-3-211. Proof of financial responsibility by applicant. Proof of financial responsibility ~~may~~ must be furnished by an applicant by showing, to the satisfaction of the department, ~~the applicant's ability to respond in damages for liability that might reasonably be attached to or result from the applicant's weather modification and control activities that the applicant has obtained a liability insurance policy of at least \$100,000. The department shall adopt rules to implement this section.~~

85-3-212. Permit fee. ~~The fee to be paid by each applicant for a permit must be equivalent to 1% of the estimated cost of the operation, the estimated cost to be computed by the department from the evidence available to it. The fee is due and payable to the department as of the date of issuance of the permit. However, if the applicant is able to give satisfactory security for the payment of the balance, the applicant may be permitted to commence the operation and a permit may be issued upon the payment of not less than 50% of the fee. The balance due must be paid within 3 months from the date of termination of the operation as prescribed in the permit.~~

85-3-213. State special revenue fund. All license ~~and permit~~ fees and fines collected under this chapter, other than those collected in a justice's court, ~~shall~~ must be deposited in the state special revenue fund for appropriation by the legislature for use by the department in the administration of this chapter ~~or as appropriated by the legislature.~~

85-3-214. Termination of licenses and permits. After notice to the licensee and a reasonable opportunity for a hearing, the department may modify, suspend, revoke, or refuse to renew any license ~~or permit~~ issued if it appears that the licensee no longer possesses the qualifications

necessary, if it appears that the licensee has violated any of the provisions of this chapter, or, in the case of a modification, if it appears that it is necessary for the protection of the health or the property of any person.

85-3-301. Records of operations maintained by licensees. A licensee shall keep and maintain a record of all operations conducted by the licensee under the license ~~and each permit for a term of 10 years. The records must show:~~ showing:

- (1) the method employed;
- (2) type of equipment used;
- (3) kinds and amounts of material used;
- (4) times and places of operation of the equipment;
- (5) names and addresses of all individuals participating or assisting in the operation;
- (6) any other general information that the department may require as provided in rule.

85-3-302. Reports of operations. The department shall require written reports, in a manner as that it provides by rule, of each operation ~~for which a permit is issued~~ that is conducted. ~~The department shall also require reports from any organization that is exempt from license and permit requirements as provided in 85-3-202.~~

Section ??? Repealer. Sections 85-3-102, 85-3-207, and 85-3-212. MCA are repealed.

Section ??? Effective date. [This act] is effective on passage and approval.

EVERYTHING BELOW ADDRESSES A COUNTY WEATHER MODIFICATION AUTHORITY.
OPEN TO COMMITTEE THOUGHTS ON THE NECESSITY OF KEEPING OR AMENDING
STATUTES.

85-3-401. Definitions. As used in this part, the following definitions apply:

(1) "Authority" means a county weather modification authority established pursuant to **85-3-411** or **85-3-413** through **85-3-415**.

(2) "Commissioner" means a county weather modification authority commissioner appointed pursuant to **85-3-411** or **85-3-413** through **85-3-415**.

85-3-411. Weather modification authority created by petition -- expiration -- reinstatement. (1) Upon receipt of a valid petition signed by at least 51% of the qualified electors of a county, as determined by the vote cast for the office of governor at the preceding general election, a board of county commissioners may by resolution create a weather modification authority. The board of county commissioners shall appoint five residents of the county as weather modification authority commissioners from those names set forth in the petition and designated by the petitioners to be appointed commissioners. If any of the five candidates named in the petition to be appointed commissioner is unable or refuses for any reason to accept appointment as commissioner or is disqualified by not meeting residence requirements as an elector in the county, the board of county commissioners shall name an appointee to fill the position. Each commissioner shall serve a 5-year term of office. If a commissioner submits a resignation in writing to the board of county commissioners or becomes unable or disqualified for any reason after accepting office, the board of county commissioners shall name an appointee to fill the vacancy. The board of county commissioners may remove any commissioner from office whenever it appears, by competent evidence and after hearing, that the commissioner has been guilty of misconduct, malfeasance, crime in office, or gross incompetency. A vacancy occurring otherwise than by expiration of a term of office must be filled for the unexpired term.

(2) An authority created pursuant to this section expires 5 years after the date of the initial appointment of the commissioners. Any unexpended funds remaining in the name of the authority after all proper bills and expenses have been paid must be transferred into the county general fund by the officers of the authority on or before the 5-year termination date provided by this section. However, all unexpended funds remaining in the name of the authority after all proper bills and expenses have been paid must remain in the name of the authority if the board of county commissioners of the county by resolution creates a weather modification authority and all its powers in accordance with **85-3-414**.

(3) Nothing in this section prevents renewal of an authority for another 5 years by petition of the qualified electors in the same manner as the initial authority was created.

(4) If more than one petition is filed with the board of county commissioners on or about the same time, the petition with the highest percentage of the qualified county electors voting for the office of governor at the preceding general election must be selected by the board of county commissioners. However, the petition with the highest percentage must have the signatures of at least 40% of the qualified electors in the county, and the total of all qualified electors signing all petitions filed must equal at least 60% of the qualified electors in the county. If the name of the same elector appears on two or more petitions, the name must be stricken from both petitions.

85-3-412. Petition content. (1) The petition for the creation of a weather modification authority and for appointment of commissioners must contain:

(a) a title with the heading "Petition for Creation of (insert name of county) Weather Modification Authority";

(b) the following paragraph: We, the undersigned qualified electors of (name of county), state of Montana, request that the (name of county) board of county commissioners create by resolution a (name of county) weather modification authority and appoint the following five qualified electors of the

county to 5-year terms of office as commissioners for the (name of county) weather modification authority:

(Here insert the name and address of each proposed commissioner for the (name of county) weather modification authority.)

(c) the following paragraph: We, the undersigned qualified electors of the (name of county), state of Montana, are notified that the creation of the (name of county) weather modification authority and the appointment of its commissioners by the (name of county) board of county commissioners will grant the authority the power to certify to the board of county commissioners a mill levy tax upon the taxable value of all taxable property in the county for a weather modification fund. The tax is subject to **15-10-420**. The weather modification fund must be used for weather modification activities as provided by **85-3-424**. We, the undersigned, understand that the authority requested in this petition expires 5 years after the creation of the weather modification authority, except that the board of county commissioners may by resolution create a weather modification authority and all its powers, including the power to certify a tax levy as provided in **85-3-422**, for one or more 5-year periods in accordance with **85-3-414**.

(d) a heading, "Committee for Petitioners", followed by this statement: The following electors of (name of county), state of Montana, are authorized to represent and act for us and shall constitute the "Committee for the Petitioners" in the matter of this petition and all acts subsequent to this petition.

(2) All signatures to the petition must be numbered and dated by month, day, and year. The name must be written, with residence address and post-office address, including the county of residence.

(3) An affidavit must be attached to each petition and sworn to under oath before a notary public by the person circulating each petition, attesting to the fact that the person circulated the petition and that each of the signatures to the petition is the genuine signature of the person whose name it purports to be and that each person is a qualified elector in the county in which the petition was circulated.

85-3-413. Creation of authority by election. When a petition signed by not less than 20% of the qualified electors of the county, as determined by the vote cast for the office of governor at the last preceding gubernatorial election, requesting an election upon the establishment of a weather modification authority is presented to the board of county commissioners not later than 90 days prior to the next general election, the board of county commissioners shall submit the question to the electors of the county at the next general election. Upon approval by a majority of the votes cast, the board of county commissioners shall by resolution establish an authority as described in **85-3-411** with all powers set out in this part, including the power to certify a tax levy as provided by **85-3-422**.

85-3-414. Creation of authority by resolution. (1) When an authority is about to expire, the board of county commissioners may by resolution authorize the creation of such weather modification authority and all its powers, including the power to certify a tax levy as provided by **85-3-422**, for an additional 5-year period if the resolution authorizing the creation of such authority is adopted by the board of county commissioners before the date prescribed in the preceding resolution for its termination. Upon passing such resolution for the creation of the authority, the board of county commissioners shall appoint five commissioners to 5-year terms of office, subsequently filling vacancies in the manner prescribed by **85-3-411**.

(2) The board may create the authority for subsequent 5-year periods by following the procedure provided in this section.

85-3-415. Creation of authority by vote after resolution of county commissioners. The board of county commissioners of any county may, by resolution after a public hearing, submit the question of the creation of a weather modification authority to the electors of the county at the next countywide election. Upon approval by a majority of the votes cast, the board of county commissioners

shall pass a resolution creating an authority as described in **85-3-411**. Such an authority has all powers provided by this chapter, including the authority to levy a tax as provided by **85-3-422**.

85-3-416. Abolishment of authority by election. When a petition signed by not less than 20% of the qualified electors of the county, as determined by the vote cast for governor in the last preceding gubernatorial election, requesting an election upon the abolishment of an authority created pursuant to **85-3-413** or **85-3-414** is presented to the board of county commissioners not later than 90 days prior to the next general election, the board of county commissioners shall submit the question to the electors of the county at the next general election. Upon approval by a majority of the votes cast, the board of county commissioners shall abolish the authority as of December 31 following the election. All unexpended funds remaining in the name of the authority after all proper bills and expenses have been paid must be deposited in the general fund of the county.

85-3-417. Procedure for abolishment of authority by recall petition -- petition form -- disposition of funds. (1) After 51% of the qualified electors of a county, as determined by the vote cast for the office of governor at the last preceding gubernatorial election, petition the board of county commissioners of their county to recall the commissioners of an authority created pursuant to **85-3-411** and to abolish the authority, the board of county commissioners shall adopt a resolution recalling all commissioners of such authority and abolishing their offices and the authority until a weather modification authority is created by petition in accordance with **85-3-411**.

(2) A recall petition must have a title with the heading "Recall Petition for the Abolishment of (insert name of county) Weather Modification Authority". The recall petition must incorporate a paragraph stating its purpose in clear language and must comply with all requirements prescribed in subsections (1)(d), (2), and (3) of **85-3-412** relating to petition content, committee for petitioners, petition details, affidavits, and persons circulating such petitions.

(3) If the board of county commissioners adopts a resolution recalling all commissioners of a weather modification authority and abolishing the authority, all unexpended funds remaining in the name of the authority, after all proper bills and expenses have been paid, must be transferred to the county general fund by the weather modification authority commissioners on the effective date of the resolution. If outstanding valid bills are unpaid after that date, the board of county commissioners may pay such obligations from money in the county general fund.

85-3-421. Commissioners -- compensation -- meetings -- officers -- disbursements. (1) A commissioner may not receive compensation for the commissioner's services. Certificates of appointment must be filed with the county clerk and recorder.

(2) The powers of each authority are vested in its commissioners. A majority of the commissioners constitutes a quorum for the purpose of conducting the business of the authority, but action may not be taken by the authority except by an affirmative vote of not less than a majority of all the commissioners. A presiding officer, vice presiding officer, secretary, and treasurer must be elected from among the commissioners. An authority may delegate to one or more of its commissioners powers or duties that it considers proper.

(3) The secretary shall keep minutes of official meetings and shall include all official business, such as operations requested, and all authorizations for payment of weather modification authority funds.

(4) Disbursements authorized by the authority must be made by check signed by the presiding officer and the treasurer of the authority. Official policies must be entered into the minutes. An annual report must disclose funds received and expended, and a copy of the report must be filed with the county clerk and recorder. The annual report must be presented at a public meeting called for that purpose.

85-3-422. Tax certified by weather modification authority -- disposition of proceeds. (1) The authority may certify annually to the board of county commissioners a tax on the taxable value of all taxable property in the county for a weather modification fund. Subject to **15-10-420**, the tax may be levied by the board of county commissioners. The weather modification fund may be used only for weather modification activities as provided by **85-3-424**. The tax certified by the authority is limited to the period of existence of the authority.

(2) The money in the weather modification fund must be invested to earn interest at the rate most advantageous to the fund, consistent with law and prudent business practice.

85-3-423. County budget waived for first appropriation -- conditions. If an emergency condition requiring prompt expenditure occurs immediately after an authority has been created by resolution of the board of county commissioners and after certification of a mill levy by the authority, the county commissioners may appropriate, from money not otherwise appropriated in the general fund, money necessary to carry out the provisions of this part.

85-3-424. Declaration of emergency -- hearing -- determination of need for weather modification operation. (1) After receiving a petition requesting an operation to increase precipitation, initiate precipitation, or suppress hail and bearing the signatures of at least 50 registered electors of the county, the commissioners of an authority shall, within 15 days after receiving the petition, publish notice of a public hearing on the request at least once in a newspaper of general circulation published within the county and conduct the hearing.

(2) If after the hearing a majority of the commissioners finds that a weather emergency exists requiring such an operation, the authority may proceed with the activities needed to initiate and conduct the requested operation.